

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) A method of determining relative levels of saturated fatty acids and unsaturated fatty acids in bovine milk obtained from one or more cows:

(a) testing genetic material of the one or more cows for the presence of DNA encoding β -casein having a proline residue at position 67 or DNA encoding β -casein having a histidine residue at position 67 of the one or more cows;

(b) identifying whether a cow or cows (i) will likely have a lower percentage of saturated fatty acids and a higher percentage of unsaturated fatty acids based on the presence of DNA encoding β -casein having a proline residue at position 67 or (ii) will likely have a higher percentage of saturated fatty acids and a lower percentage of unsaturated fatty acids based on the DNA encoding β -casein having a histidine residue at position 67 for which genetic material was tested in (a); and

(c) obtaining milk from at least one of the one or more cows after step (b).

2. (previously presented) The method as claimed in claim 1, wherein the β -casein having a proline at position 67 includes one or more of β -caseins A2, A3, D, E and F.

3. (previously presented) The method as claimed in claim 2, wherein the β -casein having a proline at position 67 is β -casein A2.

4. (previously presented) The method as claimed in claim 1, wherein the β -casein having a histidine at position 67 includes one or more of β -caseins A1, B, and C.

5. (previously presented) The method as claimed in claim 4, wherein, the β -casein having a histidine at position 67 is β -casein A1.

6. (previously presented) The method as claimed in claim 1, wherein the level of short and medium chain saturated fatty acids having 6 to 14 carbon atoms in each chain (C6:0-C14:0) is reduced compared with milk obtainable from all of the two or more cows.

7-8. (cancelled).

9. (previously presented) The method as claimed in claim 1, wherein the genetic material of the cows may be any tissue containing, or which contained, nucleated cells.

10. (previously presented) The method as claimed in claim 9, wherein the genetic material is obtained from blood, hair, or milk.

11-25. (cancelled)